

Strategies for improving health care seeking for maternal and newborn illnesses in low and middle income countries: a systematic review and meta-analysis

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Web annex 1:

Characteristics of included studies: RCTs

| Author/year | Country | Target population | Intervention | Comparison | Duration of intervention | Outcomes reported | Assessment of bias |
|------------------------------------|------------|---|---|-------------------------|--------------------------|--|--|
| Acharya 2015 [1] | India | Expectant mothers (n=11885) | Community mobilization To raise awareness of essential maternal and newborn health care through communication and advocacy activities to promote safe pregnancy and neonatal care, directly at the village level and through mass campaigns at a district level. (L1 and L2 areas where they received more intense mobilization that included L1 and strengthening village health and sanitation committees (established at the panchayat level to improve accountability related to supply of funds, facilities, commodities, and services needed to support core maternal and newborn health activities). | No comparison | 2 years | Neonatal deaths and other care related outcomes | Selection=LR Performance and detection = LR Attrition=UC Reporting = LR |
| Fotrell 2013 [2] ISRCTN01805825 | Bangladesh | Women of reproductive age (19301 live births) | Community mobilization Participatory learning and action cycle (n=9106) | Standard care (n=10204) | 2.5 years | Stillbirths, neonatal deaths, perinatal deaths, maternal deaths, and other care related outcomes | Selection=LR Performance and detection = LR Attrition=LR Reporting = LR |
| Persson 2013 [3] ISRCTN44599712 | Vietnam | Women of reproductive age (22561 births) | Community mobilization Laywomen facilitated monthly meetings during the 3 years in groups composed of health care staff and key persons in the communes. A problem-solving approach was employed including identifying and prioritizing local perinatal health problems and accomplishing improvement cycles that included concrete actions on prioritization problems (n=11906). | Standard care (n=10655) | 3 years | Stillbirths, ,neonatal deaths, maternal deaths, perinatal deaths, other care related outcomes | Selection = LR Performance and detection = LR Attrition = UC Reporting = LR |

| Author/year | Country | Target population | Intervention | Comparison | Duration of intervention | Outcomes reported | Assessment of bias |
|---|--------------|---|--|-------------------------------|--------------------------|--|--|
| Lewycka 2013 [4, 5] ISRCTN06477126 | Malawi | Women of reproductive age (26262 births) | Community mobilization Community action cycle and home visits at five time points during pregnancy and after birth (n=13683) | Standard care (n=14548) | 4 years | Stillbirths, neonatal deaths, perinatal deaths, Infant deaths, maternal deaths, and other care related outcomes | Selection=LR Performance and detection = LR Attrition=LR Reporting = LR |
| | | | Home visitation Peer counsellors made five home visits during and after pregnancy and provided education on exclusive breastfeeding, infant care, immunization, MTCT, and family planning (n=14022) | | | | |
| | | | Community mobilization and home visitation (n=13678) | | | | |
| Kirkwood 2013 [6] NCT00623337 | Ghana | Pregnant women (16329 births) | Home visitation Home visits during pregnancy to promote essential newborn-care practices, assess babies for danger signs, and refer as necessary (n=9885) | Standard care (n=10096) | 1 year | Neonatal health care seeking, stillbirths neonatal deaths, perinatal deaths, infant deaths, maternal deaths, and other care related outcomes | Selection=LR Performance and detection = LR Attrition=LR Reporting = LR |
| Nsibandwe 2013 [7-9] ISRCTN41046462 | South Africa | Pregnant women (n=2423) | Home visitation Home visits made to mothers on uptake of PMTCT interventions and appropriate newborn care practices. Babies with illness or identified danger signs were referred and also assessed the effectiveness of this referral system (n=2423) | Standard care | 3 years | Care related outcomes | Selection=UC Performance and detection = LR Attrition=UR Reporting = LR |
| Magoma 2013 [10] ACTRN 12609000268246 | Tanzania | Pregnant women (905) | Enhanced Perinatal care/education Introduction and promotion of birth plans by care providers (n=404) | Standard care (501) | 8 months | Perception of quality care, EmONC and postnatal care related outcomes | Selection=LR Performance and detection = HR Attrition=LR Reporting = LR |
| More 2012 [11, 12] ISRCTN96256793 | India | Women of reproductive age (18197 births) | Community mobilization Action learning cycle in which they discussed perinatal experiences, improved their knowledge, and took local action (n=9155 births) | Standard care (n=9042 births) | 3 years | Stillbirths, neonatal deaths, extended perinatal deaths, and other care related outcomes | Selection=LR Performance and detection = LR Attrition=LR Reporting = LR |
| Colbourn 2012 [13] ISRCTN18073903 | Malawi | Women of reproductive age (160576 births) | Community mobilization Participatory women's group community intervention (5080 births) | Standard care (4919 births) | 2 years | Stillbirths, neonatal deaths, perinatal deaths, maternal deaths, and other care related outcomes | Selection=LR Performance and detection = LR Attrition=LR Reporting = LR |

| Author/year | Country | Target population | Intervention | Comparison | Duration of intervention | Outcomes reported | Assessment of bias |
|---|----------|--|---|--|--------------------------|--|--|
| Bhandari 2012 [14] NCT00474981 | India | 29,667 births in intervention clusters and 30,813 in control clusters. | Community mobilization and home visitation Community health workers were trained to conduct postnatal home visits and women's group meetings; physicians, nurses, and CHWs were trained to treat or refer sick newborns and children; supply of drugs and supervision were strengthened | Standard care | 1.5 years | Stillbirths, neonatal deaths, perinatal deaths, infant deaths, post neonatal deaths, and other care related outcomes | Selection=LR Performance and detection = LR Attrition=UR Reporting = LR |
| Bhutta 2011 [15, 16] ISRCTN16247511 | Pakistan | Women of reproductive age (26987 pregnancies) | Community mobilization and home visitation Creation of volunteer-based village health committees, basic training and linkage of TBAs with LHWs, promotion of antenatal care, immediate newborn care, training in group counselling and communication strategies, recognition of sick newborn babies and danger signs for referral (n=14152) | Standard care (n=12835) | 2 years | Stillbirths, neonatal deaths, perinatal deaths, maternal deaths, and other care related outcomes | Selection=LR Performance and detection = LR Attrition=LR Reporting = LR |
| Wu 2011 [17] NCT 01054235 | China | | Enhanced Perinatal care/education Training township hospital midwives and instructing them in how to provide systematic maternal care, 2) informing women in the community of the importance of prenatal care, 3) if needed, providing basic medical instruments to the hospitals (n=673) | Standard care (n=591) | 2.5 years | Stillbirths, neonatal deaths, perinatal deaths, and other care related outcomes | Selection=LR Performance and detection = LR Attrition=UR Reporting = LR |
| Gill 2011[18] NCT00518856 | Zambia | 3559 infants | Enhanced Perinatal care/education Training in a modified version of the neonatal resuscitation protocol, and single dose amoxicillin coupled with facilitated referral of infants to a health centre (n=2007) | Control birth attendants continued their existing standard of care (basic obstetric skills and use of clean delivery kits). (n=1552) | 2.5 years | Stillbirths, neonatal deaths, perinatal deaths, and other care related outcomes | Selection=LR Performance and detection = LR Attrition=LR Reporting = LR |
| Okeibunor 2011 [19] | Nigeria | Women (n=1372) | Enhanced Perinatal care/education Under the programme, volunteer community-directed distributors (CDDs) trained to deliver ITNs and IPTp drugs as well as basic counselling services to pregnant women (n=751) | Standard care (n=621) | Not Reported | Care related outcomes | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR |
| Tripathy 2010 [20] ISRCTN21817853 | India | 18207 live births | Community mobilization Implemented a participatory learning cycle, through developing women's groups where they identify and prioritize maternal and newborn health problems in their community, collectively selected | Health committees in control clusters were formed to give Community a voice in the design and management of local | 2 years | Maternal and neonatal health care seeking, neonatal deaths, stillbirths, perinatal deaths, | Selection=UR Performance and detection = HR Attrition=LR Reporting = LR |

| Author/year | Country | Target population | Intervention | Comparison | Duration of intervention | Outcomes reported | Assessment of bias |
|---|------------|---|--|---|--------------------------|---|--|
| | | | relevant strategies to address those problems, implemented the strategies, and evaluated the results (n=9770) | health services (n=9620) | | maternal deaths, and other care related outcomes | |
| Azad 2010 [21] ISRCTN54792066 | Bangladesh | 29889 live births | Community mobilization Implemented a participatory learning and action cycle in which they identify and prioritize problems, then formulate strategies and lastly implemented and monitored and finally evaluated the process +intervention group was again divided into two according to the trained TBAs for asphyxia or not (n=20943) | Control group was not provided with participatory learning groups (n=22774) | 2 years | Neonatal health care seeking, neonatal deaths, stillbirths, perinatal deaths, maternal deaths, and other care related outcomes | Selection=LR Performance and detection = HR Attrition=LR Reporting = LR |
| Darmstadt 2010 [22, 23] NCT00198627 | Bangladesh | A total of 4616 and 5241 live births were recorded from 9987 and 11153 participants | Home visitation CHWs identified pregnant women; made two antenatal home visits to promote birth and newborn care preparedness; made four postnatal home visits to negotiate preventive care practices and to assess newborns for illness; and referred sick neonates to a hospital and facilitated compliance. (n=4616 live births) | Standard care (n=5241 live births) | 3 years | Neonatal deaths, stillbirths, perinatal deaths, other care related and health care seeking outcomes | Selection=LR Performance and detection = LR Attrition=LR Reporting = LR |
| Midhet 2010 [24] | Pakistan | 1661 pregnant women | Community mobilization The IEEC for women was designed to increase awareness of safe motherhood and neonatal health To women only (n=836) Community mobilization To couples (n=703) | Standard care (n=1022) | 4 years | Maternal health care seeking, neonatal mortality, stillbirths, Perinatal deaths, Maternal deaths, and other care related outcomes | Selection=LR Performance and detection = UR Attrition=UR Reporting = LR |
| Kumar 2008 [25-28] NCT00198653 | India | Population 104,123 | Community mobilization and home visitation Home visitation and community empowerment to promote essential newborn (n=1625) Community mobilization and home visitation Home visitation and community empowerment to promote essential newborn + thermospot (n=1175) | A control group received the usual services (n=1173) | 16 months | Maternal and neonatal health care seeking, maternal deaths, neonatal deaths, stillbirths, perinatal deaths, and other care related outcomes | Selection=LR Performance and detection = LR Attrition=LR Reporting = LR |
| Bhutta 2008 [29, 30] ISRCTN16247511 | Pakistan | Women of reproductive age | Community mobilization and home visitation Home-based newborn care and community organization and mobilization and group education sessions to establish an emergency transport fund for mothers and newborns (n=1478) | LHW training in home based newborn care (n=1401) | 24 months | Neonatal deaths, stillbirths, perinatal deaths and other care related outcomes | Selection=UR Performance and detection = LR Attrition=UR Reporting = LR |

| Author/year | Country | Target population | Intervention | Comparison | Duration of intervention | Outcomes reported | Assessment of bias |
|---------------------------------------|------------|--|--|---|--------------------------|---|--|
| Sloan 2008 [31] | Bangladesh | Women of reproductive age (4165 live births) | Enhanced Perinatal care/education Trained community workers to teach CKMC to expectant mothers (n=2080) | No CKMC care education (n=2003) | 6 months | Neonatal health care seeking, neonatal deaths, infant deaths, and other care related outcomes | Selection=LR Performance and detection = HR Attrition=LR Reporting = LR |
| Bashour 2008 [32] | Syria | 876 women | Home visitation Registered midwives with special training made a one or a series of home visits providing information, educating, and supporting women 4 postnatal home visits (n=285) | no visit (n=301) | 4 months | Care related outcomes, maternal health care seeking | Selection=HR Performance and detection = HR Attrition=UR Reporting = LR |
| | | | Home visitation One home visit (n=294) | | | | |
| Mboyne 2008 [33] | Uganda | Pregnant women | Enhanced Perinatal care/education Fifty-one CHWs were trained for dangers of malaria in pregnancy; malaria-prevention interventions; the benefits and side-effects of SP; taking blood samples for parasite count; haemoglobin analysis; taking the baby's weight; and estimating the gestational age (n=2081) | Routine delivery of IPTp (n=704) | Not Reported | Care related outcomes | Selection=LR Performance and detection = UR Attrition=UR Reporting = LR |
| Baqui 2008 [34] NCT00198705 | Bangladesh | 19557 pregnant women 19525 deliveries | Home visitation Trained all TBAs for improved services for enhanced referrals, ANC and postpartum visits, and provided them with delivery kits. TBAs were also linked with LHWs in the community (n=14880) | TBAs were not trained and did not receive delivery kits. Routine care was delivered by LHWs (n=15779) | 2 years | Neonatal deaths, stillbirths, perinatal deaths and other care related outcomes | Selection=LR Performance and detection = HR Attrition=LR Reporting = LR |
| | | | Community mobilization Community mobilization (n=16499) | | | | |
| Mullany 2007 [35] | Nepal | 442 pregnant women | Enhanced Perinatal care/education Education with husband antenatal health education (n=133) | No education at all (n=149) | One session of education | Care related outcomes | Selection=LR Performance and detection = UR Attrition=UR Reporting = LR |
| | | | Enhanced Perinatal care/education Couple education – antenatal health education (n=130) | | | | |
| Bari 2006 [36] | Bangladesh | 3228 deliveries | Home visitation Promoting care-seeking for sick newborns through health education of families, identification and referral of sick newborns in the community by CHWs, and strengthening of neonatal care (n=520) | Standard care (n=548) | 2 years | Neonatal health care seeking, and other care related outcomes | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR |
| Jokhio 2005 [37] | Pakistan | 19559 women | Enhanced Perinatal care/education | Usual care (n=9443) | 6 months | Maternal deaths, neonatal deaths, | Selection=UR |

| Author/year | Country | Target population | Intervention | Comparison | Duration of intervention | Outcomes reported | Assessment of bias |
|--|---------|---------------------------|--|--|--------------------------|--|--|
| | | | Trained TBAs to provide antepartum, intrapartum, and postpartum care; clean delivery; refer women EmONC (n=10114) | | | stillbirths, perinatal deaths, and other care related outcomes | Performance and detection = LR Attrition=UR Reporting = LR |
| Manandhar 2004 [38-41] ISRCTN31137309 | Nepal | Women of reproductive age | Community mobilization Participatory learning skills and generated information on pregnancy and childbirth, covering beliefs and practices in both uncomplicated and complicated pregnancies (n=3036). | improvements in equipment and training provided at all levels of the healthcare System (n=3344). | 2 years | Maternal and neonatal health care seeking, maternal deaths, neonatal deaths, stillbirths, perinatal deaths, maternal deaths, and other care related outcomes | Selection=LR Performance and detection = HR Attrition=LR Reporting = LR |
| Srinivasan 1995 [42] | India | 1623 pregnancies | Enhanced Perinatal care/education In high risk intervention package group trained midwives identified high-risk pregnancies and intervened accordingly TNG intervention package group does not include identification of high risk pregnancies (n=573) | Received general health services and no special inputs were provided by project staff (n=594) | 3 years | Care related outcomes | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR |
| Abbreviations= ANC: Antenatal Care; CKMC: Community Kangaroo Mother Care; CHW: Community Health Worker; EmONC: Emergency Obstetric and Neonatal Care; HR: High Risk; IEEC: Information, Education, Empowerment and Communication; ITN: Insecticide Treated Bednets; IPTp: Intermittent Preventive Treatment in Pregnancy; LHW: Lady Health Worker; LR: Low Risk; MTCT: Mother To Child Transmission; n=number; PMTCT: Prevention of Mother to Child Transmission; TBA: Traditional Birth Attendants; UC: Unclear | | | | | | | |

Characteristics of included studies: non-RCTs

| Author/year | Country | Target population | Intervention | Comparison | Duration of intervention | Outcomes reported | Assessment of risk of bias |
|----------------|---------|---|--|------------------------|--------------------------|---|--|
| Foord 1995[43] | Gambia | 1449 pregnancies | ANC, provided malaria prophylaxis, identification of infections and early referral to facilities (n=780) | Standard care (n=669) | 3 years | Stillbirths, perinatal deaths, and care related outcomes | Selection=HR Performance and detection = UR Attrition=UR Reporting = LR |
| Mann 2010[44] | India | Women were eligible if they were between 15 and 59 years of age | Community-centred primary health care. Activities in the project villages are carried out at three levels: village health workers, mobile health teams and the secondary-care hospital in Jamkhed (n=3002) | Standard care (n=3003) | 15 years | Neonatal deaths, infant deaths, under 5 deaths, and other care related outcomes | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR |
| Turan 2011[45] | Eritrea | postpartum women | participatory educational sessions on safe motherhood topics with women and men in the community | Standard care | 2 years | Care related outcomes | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR |

| | | | | | | | |
|--------------------------------|------------|--------------------------------------|---|---|-----------|---|--|
| Xu 1995[46] | China | Pregnant women | Improved access to maternal care services, mass health education and strengthened obstetric emergency services | Standard care | 3 years | Maternal deaths, and other care related outcomes | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR |
| Zhang 2004[47] | China | Pregnant women (n=348) | Reproductive health and family planning project | - | 4 years | Care related outcomes | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR |
| Alisjahbana 1995 [48] | Indonesia | 3275 pregnancies | Trained TBAs for enhanced complication referrals, teaching mothers for danger signs. Improved accessibility to health care services and trained hospital doctors and nurses for appropriate care management, distributed home based maternal and neonatal action records (n=2275) | Routine services provided by government health care facilities and hospitals (n=1000) | 1 year | Perinatal deaths, and other care related outcomes | Selection=HR Performance and detection = HR Attrition=UR Reporting = LR |
| Bang 1999 [49-52] | India | 5921 live births | Train paramedics, village HCW, and TBA in administration of antibiotics and counseling in mother and newborn care (n=979) | In control areas these tasks were done by the government health services and the Integrated Child Development Service (ICDS) workers (n=1108) | 3 years | Stillbirths, perinatal deaths, neonatal deaths, and other care related outcomes | Selection=HR Performance and detection = UR Attrition=UR Reporting = LR |
| Baqui 2008 Care India [53, 54] | India | 13826 live births | Antenatal intervention, birth preparedness, disposable delivery kit, newborn care, postnatal intervention vs. routine care (n=7918) | Received standard government health and Integrated Child Development Services (n=6014) | 2.5 years | Neonatal deaths, and other care related outcomes | Selection=HR Performance and detection = LR Attrition=UR Reporting = UR |
| Ronsmans 1997[55] | Bangladesh | 24059 live births | MCH-FP areas (referrals for sick cases, safe delivery kit, iron and folate for mothers, family planning, management of obstetric complication etc.) (n=2615) | Comparison area did not have MCH-FP services and was provided with routine services (n=2992) | 6 years | Maternal deaths | Selection=HR Performance and detection = UR Attrition=UR Reporting = UR |
| Bang 2005 [56] | India | 5651 deliveries 5510 live births | Assessed the impact of TBA training on neonatal resuscitation and home based care education on neonatal mortality (n=2512) | TBAs in control areas were not additionally trained as TBAs in intervention arm, but they did receive usual training from government sources (n=2958) | 10 years | Care related outcomes | Selection=HR Performance and detection = UR Attrition=UR Reporting = LR |
| Greenwood 1990[57] | Gambia | 1963 pregnancies 1843 live births | Government of Gambia implemented OHC service and trained TBAs regarding clean deliveries at home, referrals for delivery and promotion of antenatal and post care among mothers (n=1208) | Non- PHC areas have routine delivery service outlets like health facilities and hospitals (n=705) | 5 years | Perinatal deaths, neonatal deaths, and other care related outcomes | Selection=HR Performance and detection = UR Attrition=UR Reporting = UR |
| Syed 2006 [58] | Bangladesh | 3110 women | Essential newborn care was integrated into the ongoing | Standard care (n=323) | 2 years | Care related outcome | Selection=UR Performance and detection = UR |

| | | | | | | | |
|--|--------------|-------------------------------------|---|-------------------------|---------|-----------------------|--|
| | | | interventions of the NGOs. The major components of the interventions included: increasing the coverage of health workers and community-based caregivers trained and competent in providing essential newborn care and promoting positive maternal and newborn-care practices (n=2787) | | | | Attrition=UR Reporting = LR |
| Hounton 2008 [23, 59-62] | Burkina Faso | 40446 women | Effects of the Skilled Care Initiative (SCI) community mobilisation on pregnancy (N=18658) | Standard care (n=21788) | 2 years | Maternal deaths | Selection=HR Performance and detection = UR Attrition=UR Reporting = LR |
| Liu 2010 [63] | China | Pregnant women (n=9620) | Establishing the emergency obstetric centres, Strengthening the maternal health-service quality in hospitals, changing the functions of village doctors, so that they can replace the midwife (n=2991) | Standard care (n=6629) | 4 years | Care related outcomes | Selection=HR Performance and detection = UR Attrition=UR Reporting = LR |
| Fauveau 1991 [64] | Bangladesh | Women of reproductive age (n=21824) | midwives were equipped to treat immediately obstetric complications at their onset, and were backed up by an effective chain of referral. (n=1534 live births) | Standard care (n=1784) | 3 years | Maternal deaths | Selection=HR Performance and detection = UR Attrition=UR Reporting = LR |
| Abbreviations= ANC: Antenatal Care; HCW: Health Care Worker; HR: High Risk; LR: Low Risk; MCH-FP: Maternal, Child Health and Family Planning; MNH: Maternal and Newborn Health; n=number; NGO: Non-Government Organization; OHC: Outreach Health Centre; TBA: Traditional Birth Attendants; UR: Unclear Risk | | | | | | | |

Characteristics of included studies: (before/after, interrupted time series) studies

| Study ID | Country | Study design | Participants (n) | Intervention | Outcomes reported | Assessment of bias |
|----------------------|---------|--------------------|--|--|---|---|
| Awasthi 2009 [65-70] | India | Before/After study | Newborns born in last 48 hours (n=490) | Intervention comprised of Neonatal Well-Being Card. The card contained pictorial representation of neonatal danger signs, and messages regarding the importance of qualified medical care-seeking | Qualified medical care-seeking for all illnesses | Selection=HR Performance and detection = LR Attrition=LR Reporting = LR Baseline outcome and characteristics = LR |
| Daga 1993 [71] | India | Before/after study | Children under 6 years of age | Training of dais in newborn care which included warmth, resuscitation and identification and referral of a baby. Training of anganwadi workers to make a home visit, referring a baby with foot length less than 6.5 cm to PHC if dai fails to make correct assessment, monitor the progress of a borderline preterm/low birth weight baby | ANC registration, newborns referrals, neonatal deaths | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR Baseline outcome and characteristics = UR |
| Emond 2002 [72] | Brazil | Before/after study | Births Pre-intervention 1195 Births- post interventions 1225 | Women attending the community antenatal clinics were assessed as high or low risk. High-risk pregnancies were booked for delivery at hospital, Low-risk mothers were offered delivery at the polyclinic. In | Stillbirths/miscarriages, early neonatal deaths, prematurity, low birth | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR |

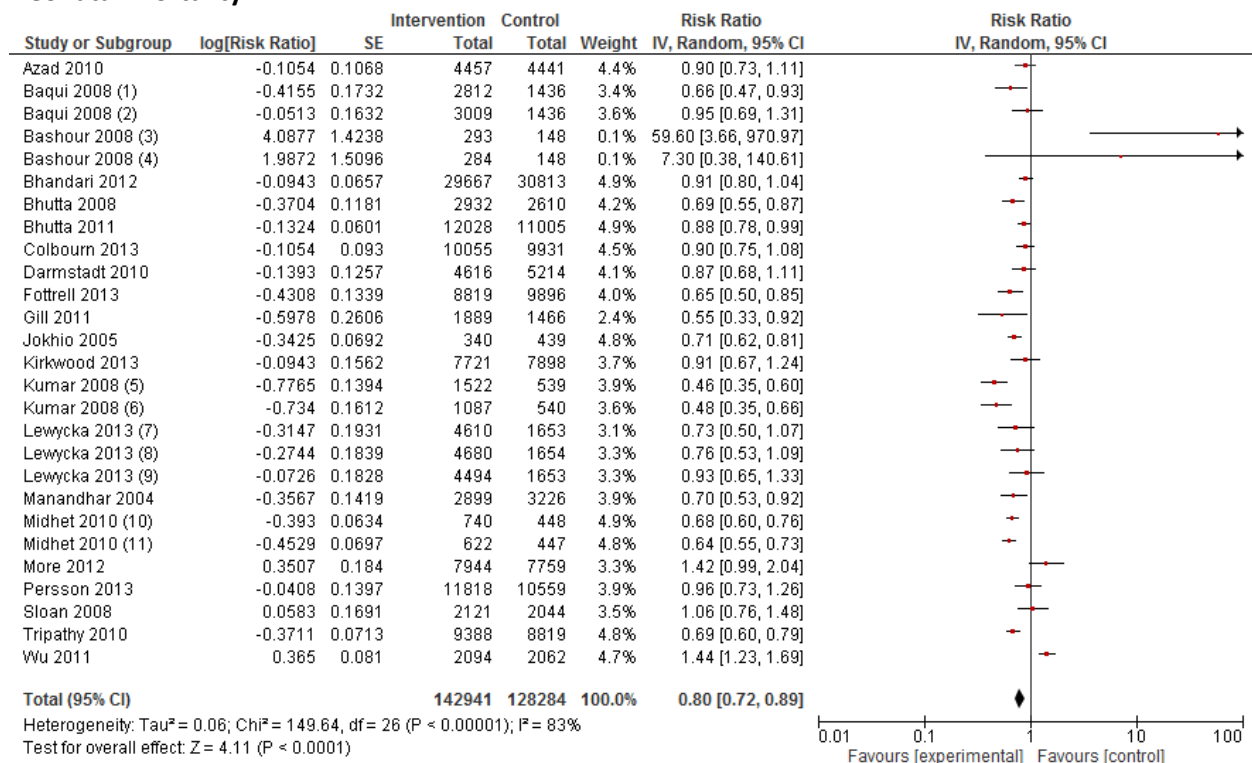
| Study ID | Country | Study design | Participants (n) | Intervention | Outcomes reported | Assessment of bias |
|---------------------|----------------------------|---------------------------|---|---|--|---|
| | | | | addition, social workers from the health centres, who also made a limited number of home visits. | weight, caesarean births, delivery at community clinic | Baseline outcome and characteristics = UR |
| Fujino 2009[73] | Zambia (low income areas) | ITS | 1546 mothers | There was a perception among the Dominican nurses that women delayed accessing care because they held beliefs and attitudes regarding obstetric care that caused them to delay seeking help. | Response to danger signs | Selection=UR Performance and detection = UR Attrition=LR Reporting = LR Baseline outcome and characteristics = UR |
| Garces 2012[74] | Guatemala (rural clusters) | Before/after studies | 522 TBAs, 10 Physicians and 12 nurse/nurse midwives participated in the study | Training of practicing birth attendants within each community to evaluate clinical condition of newborns, and Apgar scores. Birth attendants included TBAs, nurses, nurse-midwives, and physicians. | Perinatal deaths, stillbirth, early neonatal mortality | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR Baseline outcome and characteristics = UR |
| Saaka 2011[75] | Ghana | Before/after intervention | young children (6–59 months) and women of childbearing age (15–45 years). Only women aged 15–45 years, whose children were aged 0–36 months | Promoting infant feeding practices, health-seeking behaviours at the community level and enhancing the quality of care, effective case management of common childhood illnesses, EPI, improving geographical access to health services by supporting the construction of improved food storage facilities and growth monitoring centres, support of community-level health promotion activities including support of mothers' support groups and holding of health campaigns, growth monitoring, etc. | Underweight, acute and chronic malnutrition, initiation of breastfeeding, exclusive breastfeeding, continued breastfeeding, fully immunized children, health-seeking behaviour for ARI | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR Baseline outcome and characteristics = UR |
| Thassari 2000[76] | Thailand | Before/after study | pregnant women who attended an ANC clinic | Preparation for pregnancy, nutrition during pregnancy and breast feeding periods, breast feeding, preparation for delivery and preparation for postpartum. | Change in behavior, satisfaction | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR Baseline outcome and characteristics = UR |
| O'rouke 1998[77] | Bolivia | Before/after study | Not mentioned | Impact of women group diagnosing, designing, implementing, and evaluating community-based solution to maternal and perinatal health problems | Perinatal mortality, breastfeeding rates | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR Baseline outcome and characteristics = UR |
| Moran 2006 [78] | Burkina Faso | Before/after study | 180 pregnant women and 180 women delivered in 12 months | MNH program of JPIEGO focused on birth preparedness, recognition of danger sings | Planning for delivery with skilled birth attendance | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR Baseline outcome and characteristics = UR |
| Dongre 2009 [79-84] | India | Before/after study | Not mentioned | Educate women about newborn danger sings birth preparedness, health care seeking, and conduction of monthly village based meeting | Planning for delivery with skilled birth attendance | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR |

| Study ID | Country | Study design | Participants (n) | Intervention | Outcomes reported | Assessment of bias |
|--------------------|--|--------------------|--|--|--|---|
| | | | | | | Baseline outcome and characteristics = UR |
| Carlo 2010 [85-87] | Argentina, Congo DR, India, Zambia Guatemala, and Pakistan | Before/after study | 57,643 infants | Essential Newborn Care included routine neonatal care, initiation of breathing and resuscitation (including bag and mask ventilation), thermoregulation, early and exclusive breast-feeding, kangaroo (skin-to-skin) care, care of small babies, recognition of danger signs, and recognition and initial management of complications. | Neonatal deaths, stillbirths and perinatal deaths | Selection=LR Performance and detection = LR Attrition=LR Reporting = LR Baseline outcome and characteristics = UR |
| Coskun 2009[88] | Turkey | Evaluation study | | Antenatal period education module: Adaptation to pregnancy and health in pregnancy, Preparation for childbirth, Labour and delivery pain management, Maternity ward/Immediately after delivery, Puerperal women's health | Iron/folate, breastfeeding | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR Baseline outcome and characteristics = UR |
| Hodgins 2010 [89] | Nepal | Before/after study | 1470 each before & after intervention recently delivered women | community-based antenatal counseling and dispensing and an early postnatal home visit; most activities were carried out by community-based health volunteers | Advice on arrange skilled birth attendant, newborn danger signs, delivery related danger signs, delayed bathing, delay in care seeking | Selection=LR Performance and detection = LR Attrition=UR Reporting = LR Baseline outcome and characteristics = UR |
| Mushi 2010 [90] | Tanzania | Before/after study | 512 deliveries | The intervention package comprised of two main components (a) training of Safe Motherhood Promoters (these were trained specifically for this intervention study) and (b) education and awareness on maternal health aspects. | Deliveries with skilled attendant, Early ANC booking | Selection=UR Performance and detection = UR Attrition=UR Reporting = LR Baseline outcome and characteristics = UR |

Abbreviations= ANC: Antenatal Care; ARI: Acute Respiratory Infections; EPI: Expanded Program on Immunization; LR: Low Risk; MNH: Maternal and Newborn Health; n:number; TBA: Traditional Birth Attendants; UR: Unclear Risk

Web Annex 2:

Neonatal Mortality



Footnotes

- (1) Home Care
- (2) Community Care
- (3) Single visit
- (4) Four visits
- (5) Essential Newborn Care
- (6) Essential Newborn Care + thermo spot
- (7) Home visitation
- (8) Community mobilization
- (9) Community mobilization + home visitation
- (10) Women - Information and Education for Empowerment and Change
- (11) Couple - Information and Education for Empowerment and Change

Web annex 3
Search Strategy

[(‘care seeking’ OR ‘care-seeking’ OR ‘health care’ OR ‘delivery of health care’ [MeSH Terms] OR ‘health care seeking’ OR ‘community based intervention*’ OR ‘community-based intervention*’) AND (mother* OR mother [MeSH Terms] OR maternal OR women OR newborn* OR neonat* OR "infant, newborn"[MeSH Terms])]

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